

CLAIMS

1. A method for producing a bonding wafer by the hydrogen ion delamination method comprising at least a step of bonding a base wafer and a bond wafer having a micro bubble layer formed by gas ion implantation and a step of delaminating them at the micro bubble layer as a border, wherein a peripheral portion of a thin film formed on the base wafer is removed after the delamination step.
2. The production method according to Claim 1, wherein the thin film has at least an SOI layer.
3. The production method according to Claim 1 or 2, wherein the removal of the peripheral portion of the thin film is attained by removing a region of 1-5 mm from the peripheral end of the base wafer.
4. The production method according to Claim 2, wherein the removal of the peripheral portion of the thin film is attained by removing at least the SOI layer for a region of 1-5 mm from the peripheral end of the base wafer.
5. The production method according to any one of Claims 1-4, wherein the removal of the peripheral

portion of the thin film is attained by etching the wafer with masking at least portions of the top surface other than the peripheral portion to be removed.

6. The production method according to any one of Claims 1-5, wherein the removal of the peripheral portion of the thin film is attained by holding together a plurality of wafers stacked so that at least the peripheral portions to be removed should be exposed, and etching them.

7. The production method according to any one of Claims 1-4, wherein the removal of the peripheral portion of the thin film is attained by polishing only the peripheral portion.

8. A bonding wafer produced by the hydrogen ion delamination method, wherein a thin film formed on a base wafer is removed for a region of 1-5 mm from a peripheral end of the base wafer.

9. The bonding wafer according to Claim 8, wherein the thin film has an SOI layer and at least the SOI layer is removed for a region of 1-5 mm from the peripheral end of the base wafer.